

RADIOCARBON DATE FOR ABORIGINAL REMAINS AT MAROONA, VICTORIA, AUSTRALIA

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Abstract

The organic fraction of aboriginal skeletal fragments from Maroona, Victoria, gave a radiocarbon age in 8th cent. AD.

Introduction

A radiocarbon date of 1190 ± 90 years B.P. (GaK-1059) has been obtained for aboriginal skeletal fragments from Maroona, 9 miles S. of Ararat, Victoria. The site is a sand and gravel quarry operated by the Shire of Ararat, and is in the Parish of Kiora (No section, C.A. 15A). It is reached by travelling 9 miles S. from Ararat to Maroona, then about 1 mile W. to the property owned by Gleeson Brothers. The quarry is on the S. side of the road opposite Mr R. Gellie's homestead. This area has been geologically mapped by the Mines Department of Victoria as can be seen in their map of the Langi Logan Lead System (Hunter 1909). The sand pit is on the left bank of a creek which flows into the Hopkins River. The quarry reveals horizontally bedded sand and gravel which is very poorly sorted and with current bedding. Most of the rock is rather angular granitic detritus. There are also some pebbles of milky quartz up to two inches in diameter, some buckshot gravel, a few pieces of non-magnetic iron oxide, and a few pieces of mica schist; one piece of granite was seen. Thus the sand and gravel came mostly from the granites to the north, with minor contributions from bedrock and basalt. Where tested with acid, no sign of carbonates was found. The coarseness of the sediments and the current bedding show that the deposits were laid down by rapidly moving waters, and probably do not represent a very long period of sedimentation.

An imperfect but fairly well preserved calvaria (Maroona 1) was brought to the National Museum by Mrs Margaret Smith for her father Mr T. N. Muntz, engineer to the Shire of Ararat. A site was indicated by the Shire engineers in the SE. corner of the quarry where the imperfect cranium was found at a depth 'between four and five feet' by the bulldozer excavating sand and gravel. On the NW. side of the pit another locality was shown where, at a depth 'between six and seven feet', the bulldozer removed a skeleton. Fragments of this skeleton were collected by me and used for the radiocarbon dating. It was not possible to determine whether the remains had been stratified or had reached their position by some other means. Mr Muntz kindly donated all the specimens found to the National Museum. Their preservation is similar.

Stratigraphy

The fluvial sediments in which the quarry is excavated present the following succession:

- 0-3 in. Light brownish grey top soil (10 YR 6/2).
- 3-21 in. Light reddish-brown sandy gravel ((5 YR 6/4).

- 21-70 in Yellow (10 YR 7/6) sandy gravel, not strongly compacted.
 70-76 in ¹ Strong brown very compact (over 1 ton per sq ft) sand of variable colour, but chiefly 7.5 YR 5/6, with some off-white patches.

The colour references are to the Munsell Chart.

After investigating the site, I believe that all that can be said with certainty is that these skeletal remains came from the live feet of yellow sandy gravel from 21 in to 70 in from surface in the quarry described. As the radiocarbon dating was carried out on the organic fraction of these bones (not on the carbonate), the result may be considered reliable. The date is on the bones of Maroona II.

Anatomy

Professor L. F. Ray of the Department of Anatomy, University of Melbourne, kindly examined the bones. These have been determined as follows:

- Maroona I* Calvaria with heavy supraorbital ridges (N.M.V. X72,227). The facial bones and the mandible are absent, although some of the fragments collected could belong to this specimen. The post-cranial bones include a hip bone which is male. The age of the individual is estimated to have been 45 ± 5 years (Pl. 16, fig. 2).
- Maroona II* Calotte, probably of a female, whose age is estimated to have been 55 years or more (N.M.V. X72,236).
- Maroona III* A right third molar tooth showing relatively light attrition was found. The wear is so light, especially for an aborigine, that it is judged to belong to a person much younger than Maroona I or II. However, the tooth is much more worn on the left side and so without the upper jaw to show the position of wear, one cannot be certain, but this tooth may represent a third individual.

Dating

When examining a range of aboriginal skeletal material in the National Museum, I was struck by the fact that, according to the labels, two mutually exclusive periods of time are represented, viz. (1) fossils many thousands of years old, and (2) recent burials. Believing that bones of the intervening period must be available, it was decided to date by radiocarbon a few skeletons in order to discover if this were so. The first test was on the Mitiamo Skeleton from N. Victoria (GaK-703) which gave a date of approximately 5540 years (Gill 1967). The second test was made on bone fragments from Maroona which gave an age of about 1190 years. These assays indicate that the aboriginal bones which formerly were regarded as recent burials may well cover a considerable period of time. Aboriginal bones from Keera Station west of Mildura that once would have been regarded as 'recent burials' have given radiocarbon ages of 4170-5900 y. B.P. Examination of 'recent' bones shows a range in preservation which is greater than would be expected simply by reason of the fact that the bones have been buried under different climatic conditions and in different substrates.

Mortar

The bulldozer excavated a large basalt mortar (Reg. No. X72, 228) from near Maroona II. This is a good example of this type of artifact, and has two deep depressions, one on each of two opposite sides of the piece of basalt. As the mortar was found in association with the dated skeleton, it may well be of approximately the

same age. Basalt is available in the nearby countryside, so the piece of rock need not have been brought very far. It measures approximately $5\frac{1}{2}'' \times 7'' \times 4\frac{1}{2}''$, and weighs 12 lbs 6oz. (Pl. 16, fig. 1).

Conclusions

About 1200 years ago an adult aboriginal, probably a woman, lived in the Maroona district of Victoria. Part of the territory of these people was the flood plain of the stream which flows into the Hopkins River, a good place for food gathering. The only direct cultural evidence is the double mortar which was found associated with the dated skeleton. Judging by the deep depressions in this piece of basalt, the stone had been in use for a long time, presumably for milling grass seeds and pounding roots. Search failed to reveal any other evidences of aboriginal occupation.

References

- GILL, E. D., 1967. Australian aborigine 5540 years old from Mitiamo, Victoria, Australia. *Proc. Roy. Soc. Vict.* 80: 289-293.
HUNTER, S., 1909. The deep leads of Victoria. *Mem. Geol. Surv. Vict.* 7.

Explanation of Plate

PLATE 16

Basalt mortar and aboriginal calvaria from Maroona, Victoria.